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GRAYBEAL, JACKSON, HALEY LLP			KROFCHECK, MICHAEL C	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/686,555	PREWITT, LEE
	Examiner Michael Krofcheck	Art Unit 2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 09 February 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-22 and 25-32 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-22 and 25-32 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 24 August 2007 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

1. This office action is in response to amendment filed on 2/9/2007 and the petition decision on 12/17/2007.
2. Claims 1-4, 6, 8, 10, 12-14, 18-22, 26, 28, and 30 have been amended.
3. Claims 23-24 have been cancelled.
4. New claims 31-32 have been added and examined.

Drawings

5. The drawings were received on 8/24/2007. These drawings are acceptable.

Specification

6. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:
 - a. Claims 2, 4, 6, 8, 10, 12, 14, 18, 20, 22, 26, 28, 30, and 32 contain "a computer readable medium" which does not have proper antecedent basis in the specification.

The examiner suggests amending paragraph 22 to read, "The invention encompasses computer methods, computer programs on computer readable mediums (such as disks) that, when run..."

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 2, 4, 6, 8, 10, 12-14, 18, 20, 22, 26, 28, 30, and 32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

9. Claims 2, 4, 6, 8, 10, 12-14, 18, 20, 22, 26, 28, 30, and 32 are directed to, "a computer readable medium." The applicant includes explicit evidence on page 7 of the remarks filed on 2/9/2007 that the applicant intends for the claims to include carrier waves and other signals. Thus the claims are drawn to a form of energy. Energy is not a series of steps, and thus is not a process. Energy is not a physical article or object and thus is not a machine or manufacture. Energy is not a combination of substances and thus not a composition of matter.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

11. Claims 19-22 and 25-28 rejected under 35 U.S.C. 102(a) as being anticipated by the applicant's admitted prior art (AAPA).

12. With respect to claim 19, AAPA teaches of a computer method for organizing data address tables in a memory having sectors ranging from logically lowest to logically highest, comprising: (a) when writing a first data set to a memory having sectors, writing the data set to at least one lowest available sector of the memory (paragraph 4);

(b) during a session when step (a) is performed, writing a first data address table which specifies logical location of the first data set to at least one sector that is the highest available sector of the memory (paragraph 3-4; since writing to the disk is sequential, the "highest available sector" is the next sector since the next sector one is the only available sector).

13. With respect to claim 20, AAPA teaches of a computer readable medium containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 19 (since the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

14. With respect to claim 21, AAPA teaches of (c) without changing the data of the first data set, writing a second data set to at least one lowest available sector of the memory (paragraph 004-005);

(d) during a session where step (c) is performed, writing a second data address table which specifies logical locations of the second data set to at least one sector that is the highest available sector (paragraph 3-5)

15. With respect to claim 22, AAPA teaches of a computer readable medium containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 21 (since the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).
16. With respect to claim 25, AAPA teaches of where the memory is a write-once memory (paragraph 003; a CD-R is a write-once memory).
17. With respect to claim 26, AAPA teaches of a computer readable medium containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 25 (since the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).
18. With respect to claim 27, AAPA teaches of where the memory is a write-many memory (paragraph 003; a CD-RW is a write-many memory).
19. With respect to claim 28, AAPA teaches of a computer readable medium containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 27 (since the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).
20. With respect to claim 31, AAPA teaches of wherein the highest available sector of the memory corresponds to the highest logically addressable sector of a defined

range of sectors of the memory (paragraph 3-5; the next sequential sector is the highest sector that is accessible (can be read from or written into)).

21. With respect to claim 32, AAPA teaches of a computer readable medium containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 31 (since the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

Claim Rejections - 35 USC § 103

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

24. Claims 1-2, 5-10, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art (AAPA), and Jeong US patent application publication 2002/0126552.

25. With respect to claim 1, With respect to claim 1, AAPA teaches of a computer method for allowing access through a computer operating system user interface to prior and subsequent generations of data saved in a memory, comprising: (a) saving in a memory a first generation set of data and in at least one of a predetermined progression of memory divisions in the memory, a first data address table specifying at least one location of the set of data in the memory (Applicant's specification, page 2, paragraphs 004-005; where the disk is written from the lowest track and sector sequentially. The VAT ICB is stored within one of these sectors);

(b) receiving new data with which to modify the first generation set of data; (c) adding the new data to the memory while leaving the first generation set of data unchanged and saving in at least one next memory division within the predetermined progression of memory divisions in the memory a second data address table specifying at least one location of the new data (Applicant's specification, page 2, paragraphs 004-005; where the disk is written from the lowest track and sector sequentially. The VAT ICB for the new data is stored within a next one of these sectors since it is written after the new data which is after the original VAT ICB);

Jeong teaches of (d) with a user interface accessible via a user interface function of the operating system of the computer, displaying identifiers of both the first generation data set and a second generation data set resulting from the first generation data set as modified by the new data which identifiers may be selected by a user using a feature of the operating system (fig. 4-5; paragraph 0024, 0026-0027; It is abundantly clear to one of ordinary skill in the art that the menu screens are accessible via a user

interface function of the operating system of the computer, as all programs run on a computer are run under control/function of the OS, whether they are directly integrated into the OS or not).

It would have been obvious to one of ordinary skill in the art having the teachings of AAPA and Jeong at the time of the invention to include the display menus of Jeong in AAPA. Their motivation would have been to provide for simple selection and reproduction of sessions in multi-session disks (Jeong, paragraph 0008).

26. With respect to claim 2, the combination of AAPA and Jeong teaches of a computer readable medium containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 1 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

27. With respect to claim 5, AAPA teaches of where the new data adds to the first generation data set without replacing data of the first generation data set (paragraph 005; it is abundantly clear to one of ordinary skill in the art that changing the file contents is the same as adding data, deleting data and modifying existing data, since it is commonly known that the only way to change file contents, is to add new data, delete existing data, or modify existing data).

28. With respect to claim 6, the combination of AAPA and Jeong teaches of a computer readable medium containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 5 (it is abundantly

clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

29. With respect to claim 7, AAPA teaches of where the new data replaces at least a portion of the first generation data set (paragraph 005; paragraph 005; it is abundantly clear to one of ordinary skill in the art that changing the file contents is the same as adding data, deleting data and modifying existing data, since it is commonly known that the only way to change file contents, is to add new data, delete existing data, or modify existing data).

30. With respect to claim 8, the combination of AAPA and Jeong teaches of a computer readable medium containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 7 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

31. With respect to claim 9, AAPA teaches of where the new data replaces at least a portion of the first generation data set with null data (paragraph 005; paragraph 005; it is abundantly clear to one of ordinary skill in the art that changing the file contents is the same as adding data, deleting data and modifying existing data, since it is commonly known that the only way to change file contents, is to add new data, delete existing data, or modify existing data. Null data is the equivalent of no data; replacing something with nothing is the same as deleting it).

32. With respect to claim 10, the combination of AAPA and Jeong teaches of a computer readable medium containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 9 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

33. With respect to claim 15, the combination of AAPA and Jeong teaches of where the memory is a write-once memory (AAPA, paragraph 003; a CD-R is a write-once memory).

34. With respect to claim 16, the combination of AAPA and Jeong teaches of where the memory is a write-many memory (AAPA, paragraph 003; a CD-RW is a write-many memory).

35. Claims 3-4 rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA and Jeong as applied to claim 1 above, and further in view of Soderstrom et al., US patent application publication 2001/0047454.

36. With respect to claim 3, Soderstrom teaches of a newly generated address table specifying locations in different sessions (paragraph 0035; where in modifying a single file, only that file is changed, and the specific references in the VAT, and the VAT ICB is rewritten to reference the VATs).

The combination of AAPA, Jeong, and Soderstrom teaches of receiving a selection of the second generation data set and then reading the data of the second generation data set (Jeong, fig. 4-5; paragraph 0026-0028),

including at least one data element of the first generation set of data, according to address locations specified by at least the second data address table (in the combination of AAPA, Jeong, and Soderstrom, since the old data of prior sessions is addressed from a newer session, in copying that new session, the old data must be also read and copied, otherwise that newer session would have not been completely copied).

It would have been obvious to one of ordinary skill in the art having the teachings of AAPA, Jeong, and Soderstrom at the time of the invention to include the . Their motivation would have been to not require copying all of the same earlier data from an older session to the current session, thus saving disk space and allowing the copying process to occur quicker (Soderstrom, paragraph 0035).

37. With respect to claim 4, the combination of AAPA, Jeong, and Soderstrom teaches of a computer readable medium containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 9 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

38. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA and Jeong as applied to claim 1 above, and further in view of Rao, US patent 5896493.

39. With respect to claim 11, Rao teaches of wherein the operating system is a Windows operating system (column 3, lines 66-67).

It would have been obvious to one of ordinary skill in the art having the teachings of AAPA, Jeong and Rao at the time of the invention to control the computer system of the combination of AAPA and Jeong with a Windows operating system. Their motivation would have been to provide software control that is commonly used in the art and can run a significant portion of supplemental software that is written.

40. With respect to claim 12, the combination of AAPA, Jeong, and Rao teaches of a computer readable medium containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 11 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

41. With respect to claim 13, the combination of AAPA, Jeong, and Rao teaches of where the user interface function of the operating system is a Properties dialog box function with respect to the memory (Jeong, paragraph 0025-0028).

42. With respect to claim 14, the combination of AAPA, Jeong, and Rao teaches of a computer readable medium containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 13 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

43. Claims 13-14 are also rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA, Jeong, and Rao as applied to claim 12 above, and further in view of Dubal, US patent application publication 2003/0115509.

44. With respect to claim 13, Dubal teaches of accessing utility functions through the operating system properties dialog box (paragraph 0005).

It would have been obvious to one of ordinary skill in the art having the teachings of AAPA, Jeong, Rao and Dubal at the time of the invention to access the user interface through the operating system properties dialog box in the combination of AAPA, Jeong, and Rao as taught in Dubal. Their motivation would have been to reduce the need to purchase and install external software.

45. With respect to claim 14, the combination of AAPA, Jeong, Rao, and Dubal teaches of a computer readable medium containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 13 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

46. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA and Jeong as applied to claim 16 above, and further in view of Ohmi, US patent application publication 2002/0172123.

47. With respect to claim 17, Ohmi teaches of if an instruction is received to modify the first generation set of data, failing to carry out the instruction (paragraphs 0131-

0137; it is abundantly clear to one of ordinary skill in the art, that when a request to change data while the write protection is enabled, that request is not implemented).

It would have been obvious to one of ordinary skill in the art having the teachings of AAPA, Jeong, and Ohmi at the time of the invention to incorporate write protection in the re-writable media of the combination of AAPA and Jeong. Their motivation would have been to prevent the user from accidentally overwriting desired data (Ohmi, paragraph 0137).

48. With respect to claim 18, the combination of AAPA, Jeong, and Ohmi teaches of a computer readable medium containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 17 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

49. Claims 29-30 rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA and Ohmi.

50. With respect to claim 29 Ohmi teaches of if an instruction is received to modify the first generation set of data, failing to carry out the instruction (paragraphs 0131-0137; it is abundantly clear to one of ordinary skill in the art, that when a request to change data while the write protection is enabled, that request is not implemented).

51. It would have been obvious to one of ordinary skill in the art having the teachings of AAPA, and Ohmi at the time of the invention to incorporate write protection in the re-

writable media of AAPA. Their motivation would have been to prevent the user from accidentally overwriting desired data (Ohmi, paragraph 0137).

52. With respect to claim 30, the combination of AAPA, and Ohmi teaches of a computer readable medium containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 29 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

Response to Arguments

53. Applicant's arguments filed 2/9/2007 have been fully considered but they are not persuasive.

54. With respect to claim 1, the applicant argues that AAPA and Jeong do not teach of saving "in at least one of a predetermined progression of memory divisions in the memory, a first data address table" and "in at least one next memory division within the predetermined progression of memory divisions in the memory a second data address table." The examiner disagrees.

In the applicant's specification, paragraphs 4 and 5, it is disclosed that, "[w]riting to a disk begins with an inner most (logical lowest) track and sector and continues sequentially across the tracks to logically higher and higher sectors." Thus when the first VAT ICB is written it is written in this preset layout of tracks and sectors (predetermined progression of memory divisions) and when a second VAT ICB is

written (paragraph 5), it is also written in this preset layout of tracks and sectors and is written after the first VAT ICB and the new/changed data in a following or next sector.

55. With respect to claim 19, applicant argues that AAPA, Jeong, Soderstrom and Hwang do not teach of during a session when step (a) is performed, writing a first data address table which specifies logical location of the first data set to at least one sector that is the highest available sector of the memory. The examiner disagrees.

AAPA teaches that writing to a disk is sequential starting at the inner most track and sector, and that as apart of each packed writing operation a VAT ICB is written on the last address to be written (paragraph 4). Thus when writing the VAT ICB, the VAT ICB is being written to the highest available sector, since the sectors must be written to sequentially and so a sector that is not the immediately next to the one just written to is not available for writing.

Conclusion

56. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

57. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

58. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

59. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kroccheck whose telephone number is 571-272-8193. The examiner can normally be reached on Monday - Friday.

60. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

61. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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